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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,712	07/03/2003	Yoshifumi Kato	5000-5112	5007

27123 7590 07/26/2005

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EXAMINER

VU, PHU

ART UNIT PAPER NUMBER

2871

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,712

Applicant(s)

KATO ET AL.

Examiner

Phu Vu

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment and Remarks (dated 7/6/05)
2. Claims 1-18 are presented for examination.

Response to Arguments

Applicant's arguments, see Remarks filed 7/6/05, with respect to the rejection(s) of claim(s) 1-18 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Okibayashi et al. U.S. Patent No. 5505599.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-4, 6, 8 -15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okibayashi et al. US Patent No. 5504599 in view of Yokoyama et. al US patent No. 6507379.

Regarding claims 1 and 8, Okibayashi discloses a lighting system located behind a display unit, the lighting system comprising:

A substrate (fig. 1 element 27), a light-emitting element located on the substrate (fig. 1 element 30), wherein the light emitting element has a first surface and a second surface, wherein the first and second surfaces are on opposite sides of the light emitting element, wherein the second surface faces the substrate, and wherein the light emitting element contains an electroluminescent material. A first electrode located on a first surface, wherein the first electrode is of a light transmittance type (fig. 1 element 32). A second electrode located (fig. 1 element 28) on the second surface, wherein, when a voltage is applied across the electrode, the entire light-emitting element emits light. A passivation film (fig. 1 element 26) located on the first electrode, wherein the passivation film is of a light transmittance type and covers the entire surface of the first electrode that faces away from the light-emitting element; and a light outputting surface located on the passivation film wherein white light emitted by the light emitting element is outputted from the light outputting surface toward the display unit. The reference does not explicitly disclose the passivation layer being of a transmittance type however, since it rests over the light source and between the light source and the liquid crystal display it must be of the transmittance type otherwise it would render the light source inoperative. Okibayashi fails to teach the electroluminescent material having a red emitting layer, a blue emitting layer and a green emitting layer and a substrate on which the lighting element is formed. Yokoyama teaches the electroluminescent material, having a red emitting layer (fig. 2 element 104), a blue emitting layer (fig. 2 element 102), and a green emitting layer (fig. 2 element 103), that emits white light through equal summation of the primary colors, which can produce bright images using a lower

Art Unit: 2871

voltage (see column 1 lines 60-65). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use an electroluminescent layer having a red emitting layer, a blue emitting layer, and a green emitting layer that emits white light through an equal summation of the primary colors to produce bright images using a lower voltage.

Regarding claims 2 and 11, the light emitting layer is a thin sheet-like layer. Therefore, the limitation of the light-emitting layer being formed as a sheet is met.

Regarding claims 3 – 4 and 14-15, Okibayashi discloses a display including a reflecting portion which faces the second surface and reflects light that reaches the reflecting portion and the second electrode is this reflecting portion (see column 7 lines 30-35). Note the applicant's second electrode corresponds to the first electrode in the reference.

Regarding claim 6 and 17, Okibayashi discloses the electroluminescent layer made of a phosphor which is an inorganic material (see column 11 lines 15-25).

Regarding claim 9, the reference teaches a display with plurality of liquid crystal display elements (see fig. 1 element 20a).

Regarding claim 10, Okibayashi teaches the display unit (fig. 1 element 20a) as a transmissive display as presence of a backlight indicates it is a transmissive display.

Regarding claim 12, the display unit is located on the light outputting surface (fig. 1 element 26).

Regarding claim 13, Okibayashi teaches display unit (fig. 1 element 20a) is brought into intimate contact with the passivation film (fig. 1 element 26).

Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okibayashi in view of Yokohama and further in view of Tang et al US Patent No 5684365.

Regarding claims 5 and 16, Okibayashi and Yokohama disclose all the limitations of claim 5 except the electroluminescent material being an organic material. Tang discloses organic electroluminescent element that has a low drive voltage, high efficiency, and low temperature fabrication (column 2 lines 41-65). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to use an organic electroluminescent element to gain a low drive voltage, high efficiency (light per watt), and a low temperature fabrication.

Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okibayashi in view of Yokohama and further in view of Yamazaki et al. US Patent No. 6830494.

Regarding claims 7 and 18, Okibayashi and Yokohama disclose all the limitations of the claim except the passivation film made of silicon nitride, silicon oxide or diamond-like carbon. Yamazaki discloses a passivation layer between an EL layer and a TFT substrate to protect the TFT substrate from alkali metals and moisture (see column 8 lines 38-48). Therefore, at the time of the invention it would have been obvious to use silicon nitride in the passivation layer to protect the TFT substrate from alkali metals and moisture.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu Vu whose telephone number is (571)-272-1562. The examiner can normally be reached on 8AM-5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571)-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu Vu
Examiner
AU 2871


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